

22218

**11920**

**3 Hours / 70 Marks**

Seat No.

--	--	--	--	--	--	--	--	--

- Instructions :**
- (1) All Questions are *compulsory*.
  - (2) Answer each next main Question on a new page.
  - (3) Illustrate your answers with neat sketches wherever necessary.
  - (4) Figures to the right indicate full marks.
  - (5) Assume suitable data, if necessary.

**Marks**

**1. Attempt any FIVE of the following :**

**10**

- (a) State any four relational operators in 'C'.
- (b) Give the syntax for switch case statement.
- (c) State the use of continue statement.
- (d) Define the term function.
- (e) State any two advantages of pointer.
- (f) State the use of '&' and '\*' operators used with pointer.
- (g) Write any two features of structure.

**2. Attempt any THREE of the following :**

**12**

- (a) Describe scanf( ) with its syntax and example.
- (b) With suitable example, describe importance of break statement used with switch statement.
- (c) State any two advantages and any two limitations of an array.
- (d) Differentiate between call by value and call by reference methods for passing parameter. (any four points)

- 3. Attempt any THREE of the following :** 12
- (a) Describe with suitable example difference between preincrement and postincrement operator.
  - (b) Describe declaration and initialization of two dimensional array.
  - (c) Describe pointer arithmetic with any two operations.
  - (d) With example describe enumerated data type.
- 4. Attempt any THREE of the following :** 12
- (a) Write an algorithm and draw flowchart to find whether entered number is even or odd.
  - (b) Write a program in 'C' to print the table for entered number.
  - (c) Describe following functions with their syntax and example.
    - (i) strcat()
    - (ii) strcmp()
  - (d) Write a 'C' program to calculate sum of elements of given array using pointer.
  - (e) Write a 'C' program to create a structure with members as day, month and year. Assign initial values to that structure and display it.
- 5. Attempt any TWO of the following :** 12
- (a) Describe use of nested if-else statement with syntax and example.
  - (b) Write a 'C' program to find largest number from an array of 10 numbers.
  - (c) Write a 'C' program to display fibonacci series using recursion.
- 6. Attempt any TWO of the following :** 12
- (a) Write a 'C' program to accept two strings from user. Display length of both the strings. Also concatenate two strings and display the output.
  - (b) Write a 'C' program to accept two numbers. Write a function add( ) to display addition of entered number. Write a function multiply( ) to display multiplication of entered number.
  - (c) Write a 'C' program to declare structure 'employee' having data members as empid, empname. Accept this data for 5 employees and display it.